1652 #13/B DMT 5-21-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Ikuo Matsui et al.
Serial No. : 09/369,735
Filed : August 6, 1999
Title : THERMOPHILIC ENZYMES HAVING BETA-GLYCOSIDASE ACTIVITY

Art Unit : 1652
Examiner : M. Monshipouri

Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

In the specification:

Replace the paragraph beginning at page 5, line 24 with the following rewritten paragraph:

B1

-- Figure 5 shows aligned amino acid sequences of five -glycosidases from hyperthermophilic archaea. The abbreviations of the sources of the enzymes are: BGPh, -glycosidase from P. horikoshii (SEQ ID NO: 5); BMPh, a -mannosidase gene homolog from P. horikoshii (8,9)(SEQ ID NO: 6); BGPf, -glucosidase from P. furiosus (17)(SEQ ID NO: 8); BMPf, -mannosidase from P. furiosus (17)(SEQ ID NO:7); S -gly, -glycosidase from Sulfolobus solfataricus (18)(SEQ ID NO: 9); and the Consensus sequence (SEQ ID NO: 10). The conserved residues, identified automatically by the GeneWorks program, are shown in the open boxes. The reversed open triangles indicate the location of the nucleophile (E324) and the putative acid/base catalyst (E155 and H111) with R75 in the spatial proximity of the nucleophile of BGPh. The arrow shoes the prominent deletion of more than 30 residues found in BGPh. --

SubC1

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I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

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